

[stamp:] Exhibit B 4

Expert Opinion

in the matter of

StudiVZ vs. Facebook

Client

CMS Hasche Sigle
Schöttlestrasse 8
70597 Stuttgart

Counsel for StudiVZ Ltd., Berlin

Expert Witness

Prof. Dr.-Ing. [Doctor of Engineering] Georg Carle,

Holder of the seat in "Network Architecture and Network Services" at the Computer
Science Institute of the Technical University of Munich
Boltzmannstr. 3
85748 Garching bei München

Private address:
Bayerwaldstr. 4
85737 Ismaning

Tel.: +49 89-289-18030 or +49 151-12153553

Fax: +49 89-21756248

E-mail: carle@in.tum.de

Munich, February 3, 2009

Table of Contents

1.	Introduction	3
1.1	Assignment	3
1.2	Starting Point	3
1.3	Prior Experience	4
2.	Technology for Social Networking Sites	4
2.1	Basic Terms	4
2.2	Foundational Structure of Social Networking Site Platforms	5
2.3	Server Software of a Social Networking Site	6
2.4	Sequence of the Dynamic Generation of Web Pages	6
2.5	Server Architecture for Social Networking Sites with Large Numbers of Users	7
3.	Special Software of Facebook and StudiVZ	8
3.1	Regarding the Allegation that StudiVZ Copied Programming Code	8
3.2	Was it Necessary to Infringe Facebook's Copyright in Order to Program StudiVZ?	9
3.3	Availability of Facebook's Programming Code	9
4.	Analysis of the Formatting Templates of Facebook and StudiVZ	9
4.1	Design of the Facebook Web Page	9
4.2	Analysis of the Formatting Specifications of Facebook and StudiVZ	10
4.3	Commonalities in the Style Sheet Guidelines	10
5.	Functional Comparison between Facebook and StudiVZ	11
5.1	Chronology of the Establishment of Social Networking Sites	11
5.2	Initial Introduction of Specific Functions	12
6.	Market Situation	14
6.1	Launch of the StudiVZ Web Site	14
6.2	Current Market Situation	14
7.	Analysis and Summary	15
Annex A	Bibliographical References	18
Annex B	Appendix: Style Sheet Comparison	20

1. Introduction

1.1 Assignment

In accordance with the assignment from CMS Hasche Sigle, Partnership of Attorneys and Certified Public Accountants, counsel for the company StudiVZ, this expert opinion will take a position on the following questions in particular:

- What is the technological foundation of the social networking sites Facebook and StudiVZ in the form of proprietary software?
- How should the allegation that StudiVZ stole source code from Facebook be assessed?
- Was it necessary to infringe Facebook's software copyrights in order to program StudiVZ?
- Does Facebook's appearance have a particular uniqueness?
- Which innovations exist in the field of social networking sites? Are there innovations by Facebook?
- Taking into account the general development of the market and the development of Facebook's and StudiVZ's user numbers, how should Facebook's claim be assessed that StudiVZ blocked Facebook's entry into the German market?

These questions will be discussed in greater detail in Sections 2 to 8.

Section 7 contains a summary and analysis.

In Annex A, selected documents are referenced that are particularly significant to this expert opinion.

1.2 Starting Point

In order to be able to perform my analysis, CMS Hasche Sigle provided me with the following materials in particular:

- The petition from Facebook, Inc. dated November 19, 2008 filed by its counsel Heymann & Partner, 82 pages
- Exhibit K8 of the petition from Facebook, Inc: Functional overview of the Facebook web site, 1 page
- Expert opinion from Clifford Lampe, 49 pages
- Expert opinion from Bernward Schrader, 41 pages

In my research as I investigated the individual points, I referred to various books and scientific publications as well as materials available on the Internet. Annex A, "Bibliographical References," lists selected sources which are discussed in greater detail in the course of this expert opinion.

Internet Archive

There is an archive service on the Internet, which may be found at the address <http://www.archive.org>. This non-commercial service allows a user to access snapshots of a large number of web pages at different points in time. This service is provided by a non-profit project whose goal is to create a freely accessible, long-term archive of digital data. The service allows us to access copies of these web sites at a later time, thus allowing us to analyze the appearance and the layout of web sites (i.e., text, formatting types, and formatting definitions). The expert witness used this Internet archive to analyze web sites of various social networking sites and compare them to the web sites of Facebook and StudiVZ.

1.3 Prior Experience

The expert witness, Prof. Carle, has been working with various aspects of Internet technologies in the course of his research and teaching activities for many years, both in the course of his current activities as the holder of the seat in Network Architecture and Network Services at the Computer Science Institute of the Technical University of Munich and in the course of his earlier activities as the holder of the seat in Computer Networks and the Internet at the University of Tübingen and as the head of a competency center for Internet technologies at the Fraunhofer Institute for Open Communications Systems in Berlin. The expert witness discusses fundamental aspects relevant to this expert opinion in his lecture to students at the TU Munich entitled “Fundamentals: Computer Networks and Distributed Systems” [Carle 08].

2. Technology for Social Networking Sites

This section discusses the structure of Internet platforms by means of which social networking sites may be implemented, particularly the point at which proprietary software must be developed for such a platform.

2.1 Basic Terms

To better understand this expert opinion, this section will discuss some relevant specialized terms.

Hypertext markup language (HTML) is a standardized language for the description of documents, in particular web pages. A web server sends web pages to a web browser. The text contained in a web page is formatted using HTML.

Markings (tags) are used to format a web page. Tags allow the type of text (also referred to as “text type,” e.g., Heading Level 1) in a section to be marked.

Formatting specifications are definitions by means of which the concrete formatting of a text type is established (e.g., formatting of Header Level 1 is 16 point and bold).

Cascading Style Sheets (CSS) allow the summary of formatting specifications for web sites in files provided separately by the web server.

The language PHP, for “PHP, hypertext preprocessor,” originally “Personal Home Page Tools,” is a programming language for dynamically generating web pages.

2.2 Foundational Structure of Social Networking Site Platforms

Simple web sites are limited to providing via the Internet documents consisting of text with formatting that are connected (linked) to one another.

In contrast, social networking sites offer services that show distinct characteristics of Web 2.0: They allow users to not only access information, but also provide information themselves, insert additional links, come into direct contact with one another, and to follow which activities other users are pursuing on an Internet site.

In order to build such a platform, a database server is required in addition to a web server; software that must be independently developed for the platform dynamically generates web pages for the user upon demand. Therefore, the user is not accessing previously stored (and therefore static) web pages; rather the software of the platform produces the web pages dynamically.

On the server side, it is common for the language PHP to be used for this purpose (see, among others, [Schlossnagle 04], [Walter 07]). The specific functionality of a social networking platform is implemented by software in the form of source code [Hoeren 08], which is protected by copyright. This programming language was used on Facebook and on StudiVZ.

In order to run the special software of a social networking site, it is common for a configuration to be used according to the graphic below (Fig. 1).

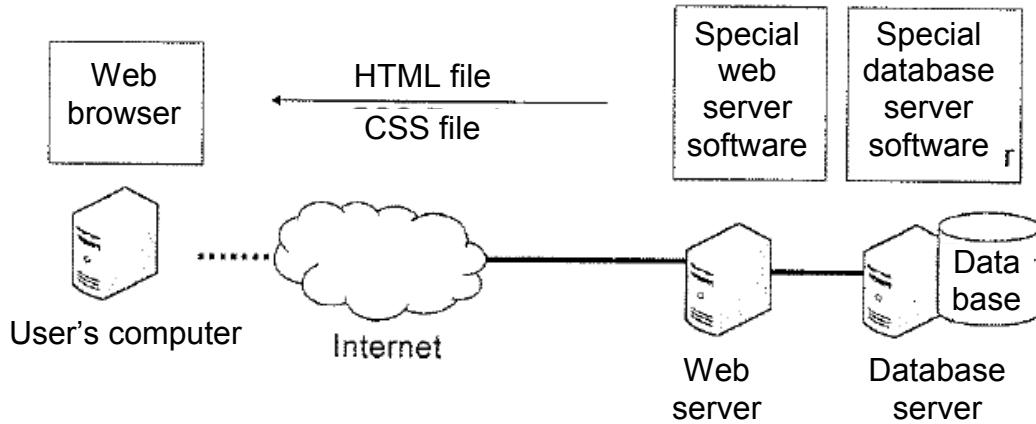


Fig. 1: Typical structure of a web application using a database

2.3 Server Software of a Social Networking Site

In the case of an Internet presence as shown in Fig. 1, the special software for the web server, along with the special software for the database, dynamically generates a web page consisting of text and graphics along with formatting specifications. HTML is used for the formatting specifications. CSS files are used as formatting guidelines. In other words, data are being sent from the web server to the web browser. These data are read by the web browser software on the user's computer in order to show the web page in question on the user's screen. The web browser interprets the formatting instructions and formatting guidelines in the data. Frequently used web browsers include Windows Internet Explorer and Firefox by the Mozilla Project. The web page data of a social networking site are therefore outputs of the special software of the Internet presence of the social networking site. The special software on the web server generates appropriate web pages for each user individually. The data of these web pages, i.e., the output of the special software of the web server, are openly accessible to the users in the same way as, for example, a document for a word processing program such as Microsoft Word would be. The data of a web site follow conventions in their structure that are necessary for the web pages to be correctly displayed in different web browsers. In contrast, the special software on the servers of a social networking site that generates these data for the web pages is not accessible; rather, such software tends to be a trade secret of the operator of the platform.

2.4 Sequence of the Dynamic Generation of Web Pages

Fig. 2 below shows how the special software of a Web 2.0 application executed on web servers and database servers is used to dynamically generate web pages. The pages accessed by a user of such a Web 2.0 application are namely built by the special software, running through steps 1) to 6) shown in Fig. 2.

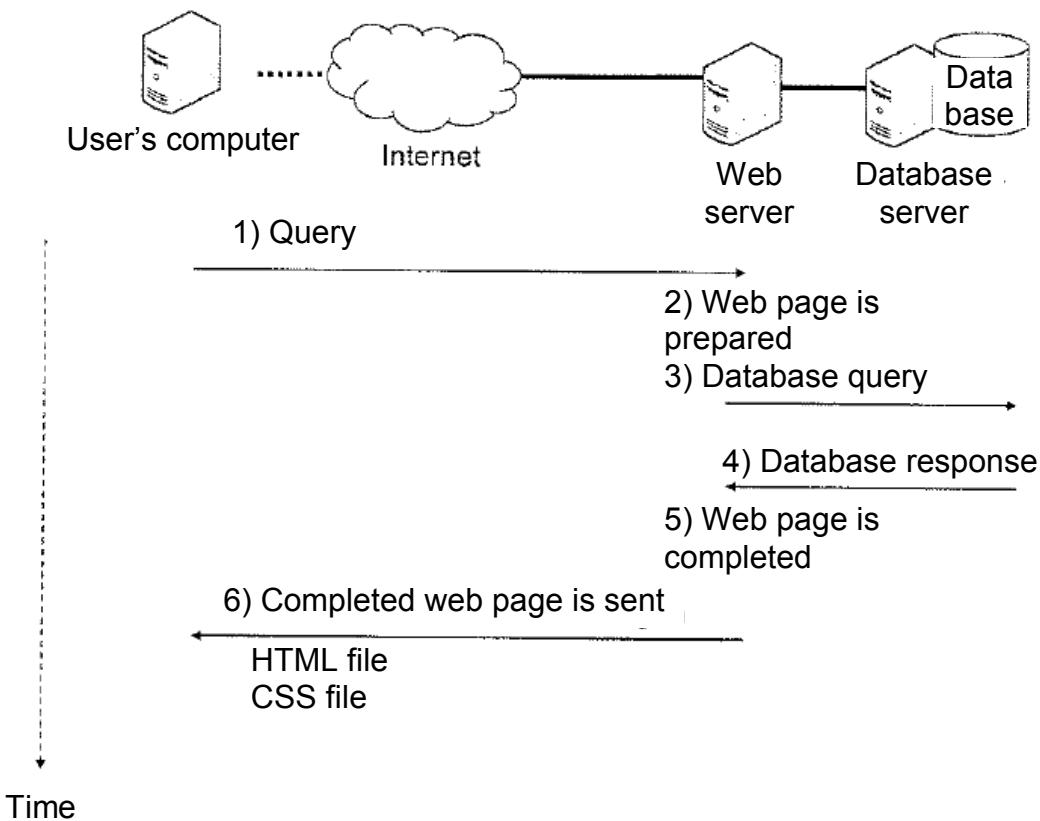


Fig. 2: Typical sequence for the generation of a dynamic web page

2.5 Server Architecture for Social Networking Sites with Large Numbers of Users

It is a requirement for web applications with databases, such as social networking sites, to be implemented for very large numbers of users. Particularly powerful hardware is necessary for this purpose. This is frequently accomplished today in that, as user numbers grow, an increasing number of web servers and database servers are used, along with a load distributor that distributes individual queries to the different web servers in a suitable fashion, see Fig. 3. In practice, a considerably greater number of computers is used than is shown in Fig. 3. According to information available on the Internet, StudiVZ uses several hundred servers, which are operated by a service provider (in StudiVZ's case, the company Telefonica). In order for a database-driven web application such as the application used for the social networking site StudiVZ to function in the manner required on a distributed platform, its special software must be adapted. This represents a large challenge that can be met only by qualified professionals. Successful businesses in the Web 2.0 field must especially ensure that they have qualified personnel with the right know-how. The special proprietary software must frequently be adapted to changing needs, which can only be

done by experts with the right know-how. For this reason, StudiVZ had no alternative but to develop its own special software for its servers.

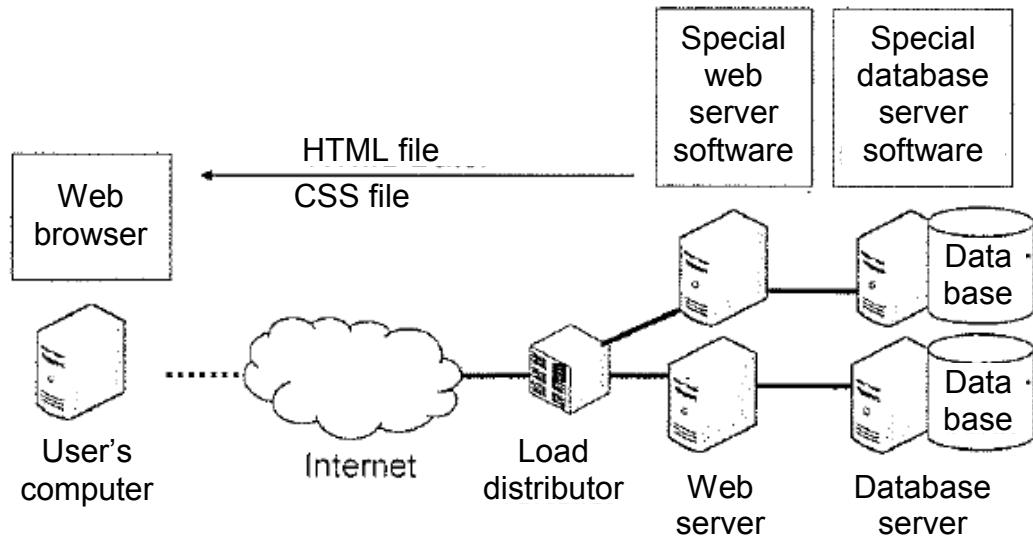


Fig. 3: Typical structure of a web application with a database for a large number of users

3. Special Software of Facebook and StudiVZ

The special software for the web server and database server represent the proprietary intellectual property of a company such as StudiVZ. Even if the outer appearance of a Web 2.0 application is copied, this software must be independently produced.

It is also important for a web site operator to have precise knowledge of all the details of its own software in order to be able to quickly add new features.

3.1 Regarding the Allegation that StudiVZ Copied Programming Code

This expert witness considers the statements from the petition alleging that StudiVZ copied source code from Facebook to be false.

There is no reason to believe that any theft of source code occurred.

On the contrary, there are many signs that the opposite is true, namely that the developers of StudiVZ developed the PHP code for their web site without any knowledge of the PHP source code of Facebook. This may be seen from the chronology of events alone. Except for the chat functionality, all of the functions in question were already contained in StudiVZ before the Facebook source code was leaked in August 2007. Facebook also did not have a chat function at the time at which the source code was leaked; the chat feature was not introduced until April 2008. The role of the PHP code, i.e., the actual programming code of the two web sites, is discussed in Section 2.3, "Server Software of a Social Networking Site."

The expert witness would like to note here that he has not been provided with the PHP source code for Facebook or the PHP source code for StudiVZ; therefore, he is able to assess the situation only based on the information available to him.

3.2 Was it Necessary to Infringe Facebook's Copyright in Order to Program StudiVZ?

As is discussed in Section 5, "Functional Comparison between Facebook and StudiVZ," the functions introduced by Facebook and StudiVZ were already considered state of the art for web applications at the time of their introduction. At the time of their introduction, the functions had already been implemented by another site. In addition, no skills are required to implement these functions beyond those that an average holder of a master's degree in computer science possesses upon completion of his or her degree or may acquire in a few weeks.

3.3 Availability of Facebook's Programming Code

The appraisal that StudiVZ did not copy Facebook's source code is not changed by the fact that a certain portion of Facebook's source code became available on the Internet.

The following occurred in August 2007: After an error in the configuration of Facebook's servers escaped notice of employees of Facebook, part of Facebook's special software was sent to the web browsers of some users instead of the dynamically generated web page (i.e., the data for displaying the web page). This part of the software was then published anonymously on the Internet.

This incident may be researched on various Internet sites, e.g., on the web blog [Cubrilovic 07]. As a commentary on this web log, Facebook employee Brandee Barker emphasizes in [Barker 07] that this incident was caused by a misconfiguration of servers by Facebook and that only a very small portion of Facebook's software became known in this manner: "A small fraction of the code that displays Facebook web pages was exposed to a small number of users due to a single misconfigured web server that was fixed immediately. It was not a security breach and did not compromise user data in any way. Because the code that was released only powers the Facebook user interface, it offers no useful insight into the inner workings of Facebook. The reprinting of this code violates several laws and we ask that people not distribute it further."

However, there is no indication that such an incident happened at any time before August 2007. Therefore, there is also no indication that such source code of the special software of Facebook was accessible to the developers of StudiVZ.

4. Analysis of the Formatting Templates of Facebook and StudiVZ

4.1 Design of the Facebook Web Page

An analysis of the design of the Facebook web page and the StudiVZ web page shows that these are simple designs that have no distinctive features that go beyond what is already written in instructional files on the design of web pages.

The basic design of the Facebook web page is a three-column layout. This sort of layout is nothing special and has proven its value over time. Among other places, the book [Andrew 05] explains in Chapter 9 how to implement a three-column layout using CSS format specifications.

Due to the simple layout of the Facebook web page, the expert witness sees no elements that point to a level of originality worthy of copyright protection.

The Lampe expert opinion states that it is precisely this simple layout that shows a level of originality. By virtue of the fact that, at the time of Facebook's launch, there were already other popular web sites with a simple design, such as Google, the view that the simple layout of Facebook is based on a special level of originality worthy of copyright protection is refuted.

4.2 Analysis of the Formatting Specifications of Facebook and StudiVZ

In the expert opinion by Bernward Schrader, the style sheets (formatting specifications) of the Facebook and StudiVZ web sites are compared. In his expert opinion, Schrader draws the conclusion that these formatting specifications have a large degree of overlap. As will be shown in the following, this conclusion is incorrect.

In the appendix Annex B, formatting definitions from 2006 are listed from the Cascading Style Sheet files for StudiVZ.de and Facebook.com, which were accessed via the archiving service archive.org.

The definitions for StudiVZ.de were taken from the file myfb.css and the definitions from Facebook.com were taken from the files facebook.css, dialog.css, info.css, and profile.css. A comparison between the formatting definitions from the Facebook.com and StudiVZ.de web sites shows that the designs were clearly implemented using different technical methods. From the numerous differences between the Cascading Style Sheet files, we can therefore see that the StudiVZ web pages were independently implemented and formatted.

4.3 Commonalities in the Style Sheet Guidelines

In Annex A 1 of Bernward Schrader's expert opinion, selected similarities of the style sheet information are emphasized. Measured by the absolute quantity of style sheet information

existing on both platforms, it is easily to ascertain that overall only very few commonalities exist. This is shown in Annex B, in which the few commonalities are emphasized in bold type.

A precise analysis of these commonalities also shows that these commonalities are the simplest of textual elements that have only a very low level of originality. The expert witness considers the level of originality of these textual elements to be so low that they lie far below the threshold required for protection of the textual elements under copyright law.

Moreover, an analysis of the relevant common textual elements shows that the commonalities are based on obvious technical requirements in situations where few reasonable alternatives exist; the resulting commonalities are therefore in no way to be viewed as problematic.

The 14 px and 11 px font sizes used by Facebook and StudiVZ are common sizes that are found very frequently on the Internet. The finding that no minimum distances are established for heading levels 1 to 5 ("margin: 0; padding: 0") also occurs very frequently and also corresponds to common recommendations for building web sites, such as, for example, in the book [Andrew 05]. Nor is the mutual selection of the fonts Tahoma, Verdana, and Arial unusual.

5. Functional Comparison between Facebook and StudiVZ

On page 49 ff. (paragraph 62 ff.), the petition states that StudiVZ reproduced and reverse engineered improvements and innovations by Facebook for years.

In reality, all of the functional characteristics common to both StudiVZ and Facebook were already known before their introduction by Facebook and had already been introduced by other social networking sites. Therefore, these functional characteristics did not represent innovations at the time of their introduction by Facebook; rather, they were already part of the state of the art for social networking sites.

However, it should be noted that StudiVZ introduced these functional characteristics to users before Facebook on a German-language Internet presence. In so doing, StudiVZ provided a service to users looking for a German-language access to these functionalities in a form that Facebook did not yet provide to those users (specifically, in German).

5.1 Chronology of the Establishment of Social Networking Sites

The following chronology [Boyd 07] illustrates that numerous other social networking sites were present on the Internet before the launch of Facebook in 2004; therefore, Facebook cannot claim that the corresponding functionalities were its own innovation.

1997: sixdegrees.com

1999: LiveJournal
 AsianAvenue
 BlackPlanet

2000: LunarStorm
 MiGente

2001: Cyworld
 Ryze

2002: Fotolog
 Friendster
 Skyblog

2003: Couchsurfing
 LinkedIn
 Tribe
 MySpace
 OpenBC
 Last.FM
 Hi5

2004: Orkut
 Then: Facebook (initially only open to students of Harvard University)
 Also in 2004: Flickr, Piczo, Mixi, Multiply, aSmallWorld, Dodgeball, Care2, Catster, Hyves

5.2 Initial Introduction of Specific Functions

The table below shows that the functions of Facebook listed in the table on page 56 f. of the petition were not first introduced by Facebook, and were instead introduced by other social networking sites.

Function	Introduced BEFORE Facebook by	On Facebook since	On StudiVZ since
Profile pages with photos	SixDegrees.com since 1997 [Boyd07], uboot.com since 2002, Friendster since 2003, MySpace since 2003, also on hskpage.de, spraydate.se, OpenBC/XING	February 2004	November 2005
Search function for acquaintances and friends	SixDegrees.com since 1998, uboot.com since 2003, Friendster since 2002, MySpace since 2003, also on spraydate.se, OpenBC/XING	February 2004	November 2005

Friend lists	SixDegrees.com since 1997, Friendster since 2002, MySpace since 2003, also on spraydate.se, OpenBC/XING	February 2004	November 2005
Waving to or nudging other users	On MySpace since 2003, called "send me a smile"	February 2004, called "poke"	November 2005, called "gruscheln"
Sending personal messages	Club Nexus since 2001 [Adamic 03], also uboot.com since 2002, MySpace since 2003, hskpage.de, Friendster, spraydate.se, OpenBC/XING	February 2004	November 2005
Founding or joining groups	Friendster since 2002, also MySpace since 2003, spraydate.se since 2003	September 2004	November 2005
Bulletin board for short messages (guest book)	LunarStorm since 2000 [Boyd 07], also MySpace since 2003	September 2004	November 2005
Posting of photos or videos	uboot.com since 2003, MySpace since 2003 [Boyd 07], flickr since February 2004 [Marlow 06]	October 2005 (photos) and May 2007 (videos)	November 2005 (photos)
Marking persons in photos (photo tagging)	flickr since February 20 [Marlow 06]	October 2005	September 2006
Make user status visible to others	spraydate.se since 2000, MySpace since 2003	April 2006	June 2007
Observation list regarding news among a user's friends (news feed)		September 2006, called "News Feed"	Not relevant, not presently supported by StudiVZ
Inclusion of applications from outside providers		May 2007	Not relevant, not presently supported by StudiVZ
Chatting with friends	spraydate.se since 2000, uboot.com since 2002, plentyoffish.com since 2005	April 2008	October 2008

Event planning	hskpage.de since 2004		Not relevant, not presently supported by StudiVZ
Classified ads			Not relevant, not presently supported by StudiVZ

6. Market Situation

In the preliminary remarks to the petition on page 4, Facebook claims that its entry into the German market has been blocked by StudiVZ. The expert witness is of the opinion that this statement cannot be supported after an analysis of the market situation.

6.1 Launch of the StudiVZ Web Site

At the time at which the StudiVZ web site was introduced in Germany, web pages of social networking sites had been known on the Internet for more than 5 years. The impetus of creating a German-language social networking site was therefore an obvious one. Acceptance problems are to be expected for a social networking site in Germany that can be accessed with only an English-language user interface. The relatively low level of use of Facebook during the time in which it was only available with an English-language user interface is therefore not astounding; on the contrary, it is to be expected.

6.2 Current Market Situation

In the meantime, Facebook has been available with a German-language user interface for quite some time. After initially weak user numbers, user numbers have recently begun to increase sharply. In the last three months, Facebook reported an increase in Germany by approximately 60% to approximately 2 million users.

Moreover, the frequency of search queries on Google for the search terms "StudiVZ" and "Facebook" (using the Google statistics at <http://www.google.de/trends>) shows that Facebook is becoming ever stronger in its competition with StudiVZ in Germany, see Fig. 4, which shows that, beginning at the start of 2009, "Facebook" is now a more frequently searched term in Germany than "StudiVZ."

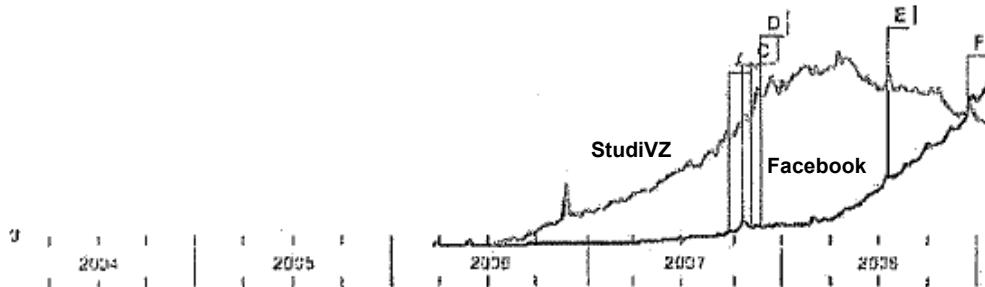


Fig. 4: Frequency of search queries for the search terms “StudiVZ” and “Facebook”

The expert witness considers the analysis contained in the petition that Facebook's initially slow market penetration in Germany was due to unlawful business practices by StudiVZ to be false.

Instead, the observable trend can be explained by the characteristics of social networking sites, which are well documented in the literature. The effect that, after a certain penetration of the market, a rapid increase in user numbers occurs stems from the following characteristic of social networking sites: the more people on a site, the greater value a social networking site has on average for the individual, and the greater attraction becoming a member of the social networking site has.

Another development on the market contributes to the fact that both social networking sites, Facebook and StudiVZ, can coexist in Germany in a reasonable fashion. It is becoming ever easier for a user to be a member of multiple social networking sites at one time. As meta services and linking services such as lifestream.fm and ping.fm (see, among others, the report [Freshzweinull 08]) become increasingly available, it is particularly easy for such a user to access information of interest to him or her and to contact persons connected to him or her.

7. Analysis and Summary

A comparison of the formatting definitions in the CSS files for the Facebook web site and the StudiVZ web site showed very few commonalities, which only related to the simplest of textual elements. These formats are in conformance with standards, common, and not subject to intellectual property protection.

As discussed in Section 3, no evidence can be found to support the theory that the actual software of the company Facebook was copied by the company StudiVZ. Instead, Section 3 states that all indications point to StudiVZ having produced its own software for its web site. However, since the expert witness did not have access to the source code for Facebook and StudiVZ, this could not be stated with absolute certainty.

As discussed in Section 5, the Facebook web site as an overall work does not contain any innovations because all elements of the functionality offered on that site had already been offered before by other web sites. Therefore, the Internet presence of Facebook is merely a combination of individual functions that were previously known.

As discussed in Section 6, Facebook's market situation in Germany has been improving steadily since it introduced its German-language web sites, such that, contrary to the statements on page 4 of the petition, Facebook's entry into the German market is in no way blocked by the Internet presence of StudiVZ. Instead, the expert witness considers that the market development of Facebook in Germany is primarily due to its business decision to not offer a German-language product until later.

Declaration

I hereby declare that the statements, analyses, and conclusions in this expert opinion were made to the best of my knowledge and in an objective fashion. I also declare that, apart from the assignment to prepare this expert opinion, I am in no way affiliated with the companies or persons mentioned in this expert opinion.

[signature]

(Prof. Dr.-Ing. Georg Carle)

Annexes: A, B

Annex A Bibliographical References

[Adamic 03] L.A. Adamic, O. Büyükkökten, E. Adar, A social network caught in the Web. *First Monday*, 8 (6) 2003,
<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1057/977>

[Andrew 05] Rachel Andrew, *Der CSS-Problemlöser – Über 100 Lösungen für Cascading Style Sheets* [The CSS Problem Solver – Over 100 Solutions for Cascading Style Sheets], dpunkt.verlag, 2005

[Barker 07] Brandee Barker, Commentary on the Weblog of Nik Cubrilovic, August 11, 2007, <http://www.techcrunch.com/2007/08/11/facebook-source-code-leaked/#comment-1551812>

[Blog 06] Weblog post, published at
<http://notes.computernotizen.de/2006/10/17/allzu-ahnlich/>

[Boyd 07] D.M. Boyd, N.B. Ellison, Social network sites: Definition, history, and scholarship, *Journal of Computer-Mediated Communication*, 13(1) 2007, article 11,
<http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html>

[Bumi 06] Weblog of Michael Bumann, published at
<http://bumi.wordpress.com/2006/10/13/studivz-in-original-facebook-farben/>

[Carle 08] Georg Carle, lecture: “Grundlagen: Rechnernetze und Verteilte Systeme” [“Fundamentals: Computer Networks and Distributed Systems”], Module No. IN0010, Computer Science Faculty, Technical University of Munich, 2008

[Cubrilovic 07] Nik Cubrilovic, Facebook Source Code Leaked, published on August 11, 2007 at <http://www.techcrunch.com/2007/08/11/facebook-source-code-leaked/>

[DLD 09] Interview with Mark Zuckerberg (Facebook) on January 27, 2009, DLD (Digital, Life, Design) conference, Munich, January 25-27, 2009, <http://www.dld-conference.com/2009/01/mark-zuckerberg-at-dld-2-mn-ge.php>

[Eberhardt 03] A. Eberhart and Stefan Fischer: *Web Services*, ISBN 3-446-22530-7, Carl Hanser Verlag, 2003

[Freshzweinull 08] Internet news service “Freshzweinull”: 2.0 of the week Lifestream.fm and Ping.fm, <http://freshzweinull.de/tag/pinfm/>

[Hoeren 08] Thomas Hoeren, Institute for Computer, Telecommunications, and Media Law at the University of Münster, Script, Internet Law 2008, available at

http://www.unimuenster.de/jura.itm/hoeren/materialien/skript/skript_september2008.pdf

[OLG Hamm 04] Hamm Higher Regional Court [OLG], ruling dated August 24, 2004, 4 U 51/04, Urheberrechtlicher Schutz von Grafiken auf einer Website [Copyright Protection of Graphics on a Web Site], JurPC Web-Dok. 260/2004, paragraph 1-28A.

[Schlossnagle 04] George Schlossnagle, Professionelle PHP 5-Programming [Professional PHP 5 Programming], Addison-Wesley, 2004

[Walter 07] Thomas Walter, Kompendium der Web-Programmierung, Springer Verlag 2007, <http://www.webkompendium.de>

Annex B Appendix: Style Sheet Comparison

The table below lists definitions from the Cascading Style Sheet files of StudiVZ.de and Facebook.com from 2006. The CSS files were accessed over the Internet from the archive services archive.org.

The definitions for StudiVZ.de were taken from the file myfb.css and the definitions from Facebook.com were taken from the files facebook.css, dialog.css, info.css, and profile.css. The definitions were sorted in the table such that the definitions beginning with "#" are first listed in alphabetical order, then the definitions beginning with ".", and then the remaining definitions.

Leading character	CSS Definitions of StudiVZ.de	CSS Definitions of Facebook.com
#a	#allesdrin { padding: 8px 0px 0px; margin: 0px auto; width: 760px; text-align: left; }	#announce { width: 120px; font-size: 11px; } #announce a:hover { text-decoration: underline; } #announce div.advert { margin: 0px auto; display: block; line-height: 14px; background: #f9f9f9; border: solid 1px #D8DFEA; border-bottom: solid 1px #3B5998; margin: 0px 0px 7px; padding: 1px 0px 2px; } #announce div.clickable { cursor: pointer; } #announce h3 { text-align: center; margin: 4px 5px 3px; color: black; font-weight: bold; } .credit { text-align: center; } .create { text-align: center; background: #f7f7f7; border: solid 1px #D8DFEA; padding: 4px 0px; } .seeall { margin: 5px 0px; text-align: right; } #announce h4 { color: #3b5998; font-weight: bold; text-align: center; font-size: 13px; border-bottom: solid 1px #D8DFEA; padding: 0px 0px 3px; margin: 5px 5px 3px; } #announce p { margin: 0px 0px 3px 5px; overflow: hidden; width: 110px; color: #222222; word-wrap: break-word; }
#b		#book { padding: 8px 0px 0px 0px; margin: 0px auto; text-align: left; width: 760px; } #bottompager b { border-bottom: none; border-top: solid 2px #3B5998; } #bottompager.flip b { border-top: none; border-bottom: solid 2px #3B5998; }
#c	#content { padding: 10px 0px 10px 10px; } #content, #contentx { border-left: solid 1px #ffb0b0; border-right: solid 1px #ffb0b0; } #content:after { content: ". "; display: block; height: 0; clear: both; visibility: hidden; } #contentx { padding: 0px; } #contentx:after { content: ". "; display: block; height: 0; clear: both; visibility: hidden; } #countdown { margin-bottom: 10px; color: gray; font-size: 9px; } #currentpicture { margin: 10px 10px 20px 20px; float: left; width: 200px; }	#chk { border: 0; } #content { padding: 12px 0px; border-bottom: solid 1px #3B5998; border-left: solid 1px #D8DFEA; border-right: solid 1px #D8DFEA; } #content:after { content: ". "; display: block; height: 0; clear: both; visibility: hidden; }

	#currentpicture h4 { margin: 0px; padding: 1px 0px 4px; font-size: 11px; border-bottom: none; }	
#d	<pre>#dialog .buttons { padding: 10px; text-align: right; } #dialog .buttons input { margin-left: 10px; } #dialog { color: gray; } #dialog { margin: 0px auto; background: #f7f7f7; border: solid 2px #ee0000; } #dialog h3 { margin-left: 10px; padding: 0px 0px 2px; font-size: 15px; color: #ee0000; font-weight: bold; } #dialog h4 { border-bottom: solid 1px #ee0000; margin: 5px 10px 5px; padding: 0px 0px 2px; font-size: 13px; } #dialog p { margin: 10px; text-align: left; } #dialog td .formtable { margin: 5px 10px 0px; } #dialog td #d { border: none; } #dialog td.dialog { padding-top: 10px; border: solid 1px #ee0000; } #dialogm { margin: 0px 20px; background: #f7f7f7; border: solid 2px #ee0000; }</pre>	
#e	<pre>#error { margin: 0px 10px 10px; padding: 10px; border: solid 1px #dd3c10; background: #ffebe8; } #error a { text-decoration: underline; color: #dd3c10; } #error p { margin: 4px 0px 0px; }</pre>	
#f	<pre>#friendsecheder { padding: 6px 8px; text-align: center; } #friendtables { margin: 0px; padding: 10px; background: #ffe0e0; }</pre>	<pre>#fnav { font-size: 11px; list-style: none; margin: 0; padding: 0; text-align: center; } #fnav li { display: inline; } #fnav li a { padding: 2px 5px; } #fnav li a:hover { color: white; background: #3b5998; } #footer { text-align: center; color: #3B5998; font-weight: bold; line-height: 21px; font-size: 11px; margin: 0px; padding: 0px 10px; background: #D8DFEA; border-bottom: solid 1px #3B5998; }</pre>
#g		<pre>#gnav { left: 250px; line-height: 25px; list-style: none; margin: 0px; padding: 3px 0px; position: absolute; text-align: right; top: 1px; width: 500px; } #gnav a { color: #D8DFEA; margin: auto 0px; padding: 2px 4px; } #gnav a:hover { background-color: #526DA4; color: white; } #gnav li { display: inline; }</pre>
#h	<pre>#haupt { font-size: 11px; margin-left: 12px; float: left; text-align: left; width: 628px; } #haupt a:hover { text-decoration: underline; } #headline { background: #e06060; color: white; font-weight: bold; line-height: 23px; font-size: 14px; padding: 0px 10px 0px; margin: 0px; border-bottom: solid 1px #ee0000; } #headline dbl { text-align: right; } #headline dbl h1 { float: left; } #homelink { position: absolute; left: 132px; width: 190px; height: 33px; }</pre>	<pre>#header { font-weight: bold; line-height: 23px; font-size: 14px; padding: 0px 10px 0px; margin: 0px; background: #6d84b4; color: white; border-bottom: solid 1px #3B5998; } #header.withsubtitle { text-align: right; } #header.withsubtitle h1 { float: left; text-align: left; } #homelink { float: left; height: 33px; line-height: 33px; width: 250px; position: absolute; } #homelink { height: 33px; left: 132px; position: absolute; width: 118px; }</pre>

		<pre>#homelink a { display: block; height: 33px; text-indent: -9999px; } #homelink a:hover { text-decoration: none; }</pre>
#l	<pre>#leftbar { margin-top: 0px; float: left; width: 120px; } #leftlogo2 { position: relative; width: 132px; height: 32px; background-image: url(../images/logo3_2.gif); background-repeat: no-repeat; } #leftnav { border-bottom: solid 1px white; margin: 10px 0px; padding: 0px; } #leftnav a { border-bottom: solid 1px #ffb0b0; padding: 2px 3px; margin: 0px; width: 114px; display: block; float: left; } #leftnav a.slimleft { width: 65px; } #leftnav a.slimright { width: 43px; text-align: right; } #leftnav a.slimright:hover { color: white; } #leftnav a:hover { text-decoration: none; color: white; background: #ee0000; } #leftsponsor { margin: 10px 0px; color: grey; } #leftsponsor a:hover { text-decoration: underline; } #leftsponsor table.werbetb { color: black; } #leftsponsor table.werbetb a:hover { text-decoration: underline; } #loginform { text-align: center; margin: 20px; } #loginform p { text-align: center; margin: 0px 20px 10px; } #loginform table { margin: 0px auto; }</pre>	
#m	<pre>#mailboxfilters { padding: 10px 0 10px 10px; } #mailboxtabbox { margin: 0; padding: 0; border-bottom: solid 1px #EE0000; } #messagehistory .date { color: gray; } #messagehistory .incoming { font-weight: bold; color: #DF7373; } #messagehistory .outgoing { font-weight: bold; color: #DC6565; } #messagehistory { margin: 10px auto; width: 380px; } #messagehistory h4 { margin: 5px 0px; padding: 0px 0px 2px; font-size: 13px; border-bottom: solid 1px #D8Dfea; } #messagehistory table { margin: 0px; } #messagehistory table tr { vertical-align: top; } #messagehistory td { padding: 5px; }</pre>	
#n		<pre>#nav { list-style: none; margin: 0px; padding: 1.0em 0px; } #nav li { border-bottom: 1px solid #d8dfea; font-size: 1.0em; } #nav li a { background: #eee; background: white; border-bottom: 1px solid green; border: 0; display: block; padding: 2px 3px; } #nav li a:hover, #nav li#myfriends { clear: left; }</pre>

		<pre>#nav li#myprofile { border-bottom: 0; } #nav li#myprofile a { border-bottom: 1px solid #d8dfca; padding: 0; width: auto; } #nav li#myprofile a.edit { color: gray; float: right; padding: 2px 0; text-align: center; width: 48px; } #nav li#myprofile a.hasedit { float: left; padding: 2px 0px 2px 3px; width: 69px; } #nav li#myprofile a:hover { background: #3b5998; color: white; }</pre>
#p	<pre>#pagefooter { background: #ffe6c6; border-top: solid 1px #ee0000; border-bottom: solid 1px #ff8080; clear: both; font-size: 10px; line-height: 15px; padding: 4px 0px; margin: 0px; } #pagefooter a { padding: 3px 5px; } #pagefooter a:hover { color: white; background: #ee0000; text-decoration: none; } #pagefooter p { text-align: center; margin: 0; padding: 0; } #partyprofile { background: url(../images/slimrightbg.gif) repeat-y right; } #profileganzbreit { float: left; width: 396px; padding: 0px; margin: 0px 10px 0px 0px; } #profileimage { text-align: center; }</pre>	<pre>#pagebody { font-size: 11px; margin-left: 12px; float: left; text-align: left; width: 628px; } #pagefooter { clear: both; font-size: 10px; line-height: 15px; padding: 10px 0px; border-top: solid 1px #D8DFEA; } #pagefooter a { padding: 3px 5px; } #pagefooter a:hover { color: white; background: #3B5998; text-decoration: none; } #pagefooter p { text-align: center; margin: 0; padding: 0; } #pageheader { background: #3b5998 url(/images/pageheaderbg.gif) no-repeat top left; height: 33px; position: relative; width: 760px; }</pre>
#q	<pre>#quickmail { float: right; text-align: right; width: 466px; padding: 0px 0px 6px; margin: 0px; } #quicksearch { width: 120px; } #quicksearch input { width: 115px; }</pre>	<pre>#qsearch #q { width: 115px; } #qsearch { padding: 2px 0px 0px 0px; } #qsearch.hourglass #q { padding-left: 17px; width: 98px; }</pre>
#s	<pre>#searchform { text-align: center; margin-bottom: 20px; } #searchform input.queryfield { font-size: 18px; width: 400px; margin-bottom: 10px; } #slimcol { float: left; width: 200px; padding: 0px; margin: 0px 10px 0px 0px; } #squicklogin .buttons { text-align: left; padding: 3px 0px 0px; } #squicklogin .inputtext { width: 115px; } #squicklogin { width: 120px; margin: 0px 0px 10px; padding: 0px; } #squicklogin label { display: block; padding: 0px 0px 2px; margin: 0px; color: gray; font-weight: bold; } #subheadline { font-weight: normal; font-size: 11px; margin-bottom: 15px; padding: 0px 0px; } #subheadline2 { font-weight: normal; font-size: 11px; margin-bottom: 0px; padding-top: 10px; padding-</pre>	<pre>#sidebar .adtable { /* For Backwards Compat with Ads */ border: solid 1px lightgrey; } #sidebar { float: left; padding: 6px 0px 10px 0px; width: 120px; } #snav { border-bottom: solid 1px white; /* firefox fix */ margin: 0px 0px 10px 0px; padding: 0px; } #snav a { border-bottom: solid 1px #D8DFEA; padding: 2px 3px; margin: 0px; width: 114px; display: block; float: left; } #snav a.edit { width: 40px; color: gray; text-align: center; } #snav a.edit:hover { color: white; } #snav a.hasedit { width: 68px; } #snav a:hover { text-decoration: none; color: white; background: #3B5998; } #squicklogin .inputtext { width: 115px; } #squicklogin { width: 120px; margin: 0px 0px 10px; padding: 0px; } #squicklogin label { display: block; padding: 0px 0px 2px; margin: 0px; color: gray; font-weight: bold; } #squicklogin table { border-width: 0px; border-style: none; border-collapse: collapse; border-spacing: 0px; margin: 3px 0px 0px 0px; } #squicklogin td { text-align: center; border: none; padding: 0px 0px 3px 0px; }</pre>

	<pre>bottom: 10px; padding-left: 10px; border-left: solid 1px #fffb0b0; border-right: solid 1px #fffb0b0; }</pre>	<pre>#ssponsor { margin: 10px 0px; color: grey; } #ssponsor a:hover { text-decoration: underline; } #ssponsor table.adtable { color: black; } #ssponsor table.adtable a:hover { text-decoration: underline; } #ssystemstatus { width: 120px; margin: 0px 0px 10px; padding: 10px; border: solid 1px #dd3c10; background: #ffce8; } #subheader { text-align: left; color: #3B5998; font-weight: bold; line-height: 21px; font-size: 11px; margin: 0px; padding: 10px 10px 0px; background: white; border: solid 1px #D8DDEA; border-top: none; } #subheader a { font-weight: normal; } #subheader div { font-weight: normal; } #subheader.withsubtitle h2, #footer.withsubtitle h2 { float: left; text-align: left; } #subheader.withsubtitle, #footer.withsubtitle { text-align: right; } #suggest { position: absolute; background: #fff; width: 150px; } #suggest div { background: #fff; color: #000; padding-left: 4px; text-align: left; } #suggest div.over { color: #fff; background: #000; }</pre>
#t	<pre>#tabs .activetab a { color: white; background: #ee0000; } #tabs .activetab a:hover { text-decoration: none; } #tabs .inactivetab a:hover { background: #ffc6c6; text-decoration: none; } #tabs { text-align: center; padding: 4px 0px; } #tabs a { margin: 0px; padding: 4px; } #tabs div { display: inline; padding: 0px; margin: 0px; } #tabs.mailboxtabs { width: 160px; margin: 10px 0 0 0; border-bottom: none; } #teaserpic { position: relative; horizontal-align: right; float: right; margin: 12px 8px; width: 215px; height: 138px; background-image: url(../images/teaser3.jpg); background-repeat: no-repeat; } #topheader { position: relative; width: 760px; height: 40px; background-image: url(../images/logotop2.gif); background-repeat: no-repeat; } #topnav { text-align: right; position: absolute; line-height: 32px; list-style: none; top: 1px; left: 320px; width: 430px; margin: 0px; padding: 3px 0px; } #topnav a { margin: auto 0px; padding: 2px 5px; color: #ffefef; } #topnav a:hover { color: white; background-color: #e06060; } #topnav li { display: inline; }</pre>	<pre>#tabs .activetab a { color: white; background: #3B5998; } #tabs .activetab a:hover { text-decoration: none; } #tabs .disabled { color: #c0c0c0; margin: 0px; padding: 4px; text-decoration: none; } #tabs .inactivetab a:hover { background: #D8DDEA; text-decoration: none; } #tabs { text-align: center; padding: 4px 0px; margin: 10px 20px 10px; border-bottom: solid 1px #3B5998; } #tabs a { margin: 0px; padding: 4px; } #tabs div { display: inline; padding: 0px; margin: 0px; } #toppager a:hover, #bottompager a:hover { text-decoration: none; } #toppager b { border-bottom: solid 2px #3B5998; }</pre>
#u	<pre>#uploadpicture .inputcheckbox { float: left; display: block; margin: 2px 5px 8px 0px; } #uploadpicture { margin: 10px 20px 20px 10px; float:</pre>	

	<pre>left; width: 310px; } #uploadpicture h4 { border-bottom: solid 1px #ee0000; margin: 0px; padding: 0px 0px 2px; font-size: 13px; } #uploadpicture small { display: block; margin: 5px 0px; color: gray; } #userprofile { background: url(..../images/slimleftbg.gif) repeat-y; } #yspacer { border-top: solid 1px #ee0000; padding: 4px 0px; margin: 0px; width: 120px; height: 18px; display: block; float: left; }</pre>	
a	<pre>.alright { text-align: right; } .altop { vertical-align: top; }</pre>	<pre>.allfrom { border: 0; }</pre>
b		<pre>.bluebox { margin-left: auto; margin-right: auto; width: 532px; padding: 5px 0; } .bluecontainer { padding: 10px 8px; } .blueheader { margin: 0px; padding: 2px 8px; font-size: 11px; font-weight: bold; color: #3B5998; background: #D8DFFA; border-top: solid 1px #3B5998; /* #8a9cc1; */ } .blueheader h2 { color: #3B5998; font-size: 11px; } .bluesubheader { color: #3B5998; font-weight: bold; font-size: 12px; margin: 0px; padding: 2px 8px; background: #eee; border-top: solid 1px #ccc; }</pre>
c	<pre>.center { margin-left: auto; margin-right: auto; } .Column2 { width: 88px; margin-right: 0px; } .confirm .image { width: 110px; text-align: left; } .confirm { padding: 10px; background: #f7f7f7; border: solid 1px #ee0000; margin: 0px 10px 10px; } .confirm td { vertical-align: top; }</pre>	<pre>.center { margin-left: auto; margin-right: auto; }</pre>
f	<pre>.float400 { margin: 0px; padding: 10px; float: left; width: 450px; } .floatleft { margin: 0px; padding: 10px; float: left; } .formbuttons .inputsubmit, .formbuttons .inputbutton { margin: 2px 4px; } .formbuttons { text-align: center; margin: 10px 10px; } .formtable .formerror { font-size: 10px; color: #FF4040; } .formtable { margin: 0px auto; } .formtable { margin: 0px; } .formtable td { border: none; margin: 0px; padding: 3px 1px; } .formtable td.label { padding-right: 10px; font-weight: bold; color: gray; } .formtable td.labelX { padding-right: 10px; font- weight: bold; color: #FF4040; } .formtable td.labelY { padding-right: 10px; } .formtable tr.tallrow { vertical-align: top; } .friendtable .image { vertical-align: top; text-align: left; width: 110px; } .friendtable .info .label { width: 70px; color: gray; } .friendtable .info .label2 { width: 50px; color: gray; }</pre>	

	<pre>.friendtable .info { vertical-align: top; width: 370px; } .friendtable .info table { width: 225px; } .friendtable .info td { vertical-align: top; font-size: 11px; line-height: 14px; margin: 0px; padding: 0px 0px 1px 0px; } .friendtable .myactions { width: 270px; } .friendtable { margin: 0px; padding: 8px; margin-bottom: 8px; background: white; border: solid 1px #ff8080; }</pre>	
.h	<pre>.homesick { width: 440px; margin-bottom: 20px; }</pre>	<pre>.html_box { background: #f7f7f7; padding: 5px; margin-top: 10px; width: 170px; }</pre>
.i	<pre>.inputtext, .inputpassword { border: 1px solid #7b9ebd; padding: 3px; font-size: 11px; } .inputtext_lectures { border: 1px solid #7b9ebd; padding: 3px; font-size: 11px; width: 440px; }</pre>	<pre>.infotable { margin: 0px; } .infotable td { vertical-align: top; font-size: 11px; margin: 0px; padding: 0px; padding-bottom: 2px; } .infotable td.label { padding-right: 10px; color: gray; }</pre>
.l	<pre>.labelexplain { font-weight: normal; font-size: 9px; margin-top: 3px; }</pre>	
.m	<pre>.margtop10 { margin-top: 10px; } .morefriends { margin-top: 5px; } .myactions { margin: 0px; background: white; } .myactions a { margin: 0px; padding: 2px 3px; display: block; background: white; border-bottom: solid 1px #ff0b0b; font-size: 11px; } .myactions a:hover { color: white; background: #cc0000; text-decoration: none; } .otherSchools { float: left; margin: 0px; padding: 0px; width: 88px; margin-right: 5px; line-height: 14px; list-style: none; }</pre>	
.n		<pre>.note_dialog { background: #fff; padding: 10px; margin: 0 10px 10px 10px; border: 1px solid #bdc7d8; color: #444; }</pre>
.p	<pre>.padtop10 { padding-top: 10px; } .padvert10 { padding: 10px 0px; } .pager .inactive { padding: 2px; font-weight: bold; font-size: 11px; } .pager { background: white; } .pager a { padding: 2px; background: white; font-size: 11px; } .pager a:hover { color: white; background: #ee0000; text-decoration: none; } .PageTabs { padding: 8px; text-align: right; } .PageTabs a { padding-bottom: 1px; } .PageTabs a:hover { color: white; background: #ee0000; } .PrfFriendTbl { margin: 0px; padding: 0px; } .PrfFriendTbl img { margin-bottom: 4px; } .PrfFriendTbl td { margin: 0px; padding: 3px 0px; vertical-align: bottom; text-align: center; width: 62px; font-size: 11px; } .profilebox { margin: 0px; padding: 10px 8px 15px }</pre>	<pre>.pagebody a:hover { text-decoration: underline; } .pager { padding-left: 4px; text-align: right; } .pager a { font-weight: normal; margin: 0px; padding: 3px 3px; } .pager a:hover { color: white; margin: 0px; padding: 3px 3px; background: #3B5998; } .pager b { padding: 2px; font-style: normal; font-weight: bold; color: #3B5998; border-bottom: solid 2px }</pre>

	<pre> 8px; line-height: 13px; overflow: visible; } .profilebox div.clear { clear: both; margin: 0px; padding: 0px; border: none; background: none; } .profilebox h4 { margin-top: 1px; margin-left: 0px; margin-bottom: 0; padding-left: 0px; } .profilesubheader { background-color: #FFFF00; color: #3B5998; font-weight: bold; font-size: 12px; margin: 0px; padding: 2px 8px; background: #eee; border-top: solid 1px #ccc; } .profileTable .label { width: 120px; color: gray; } .profileTable { margin: 0px; padding: 0px; margin- bottom: 8px; margin-left: 0px; } .profileTable td { vertical-align: top; font-size: 11px; line-height: 13px; margin: 0px; padding: 1px 0px 1px 0px; } .rightwing { float: right; width: 140px; text-align: center; border-left: solid 1px #ffb0b0; border-bottom: solid 1px #ffb0b0; } </pre>	
.s	<pre> .searchbla { text-align: left; width: 400; padding-left: 110px; padding-right: 130px; padding-bottom: 10px; } .secheader { margin: 0px; padding: 2px 8px; color: #904040; background: #ffb0b0; font-size: 11px; font- weight: bold; border-top: solid 1px #ee0000; border- bottom: solid 1px #ff8080; text-align: left; } .secheader h2 { color: #904040; font-size: 11px; } .secheader2 { margin: 0px; padding: 2px 8px; color: #904040; background: #ffb0b0; font-size: 11px; font- weight: bold; border-top: solid 1px #ee0000; border- bottom: solid 1px #ff8080; text-align: left; margin- bottom: 15px; } .slimcolbox { margin: 0px; padding: 10px 8px 15px 8px; line-height: 13px; overflow: visible; } .slimcolbox div.clear { clear: both; margin: 0px; padding: 0px; border: none; background: none; } .slimcolbox h4 { margin-top: 1px; margin-left: 0px; margin-bottom: 0; padding-left: 0px; } .status { margin: 0px 10px 10px; padding: 10px; border: solid 1px #ffe222; background: #fffbe2; } .status a { text-decoration: underline; } .status p { margin: 4px 0px 0px; } .subheader { background: #ffe0e0; color: #904040; font-weight: bold; font-size: 12px; margin: 0px; padding: 2px 8px; border-bottom: solid 1px #ff8080; } .suchterm { color: #ff6600; } .sym_friends { float: left; width: 120px; height: 100px; background-image: url(../images/handshake.gif); background-repeat: no-repeat; } .sym_pokes { float: left; width: 120px; height: 100px; background-image: url(../images/hand.gif); background-repeat: no-repeat; } </pre>	
.t	<pre> .TabsWithMargin { margin: 10px 20px 10px; border- bottom: solid 1px #ee0000; } </pre>	

	<pre>.underlined { border-bottom: solid 1px #ee0000; margin: 0px; padding: 0px 0px 2px; } .wallpost .info .actions { padding: 3px 5px; background: #f7f7f7; xborder: solid 1px #ffc6c6; border-bottom: solid 1px #ffc6c6; border-top: none; }</pre>	
w	<pre>.wallpost .info .actions a:hover { text-decoration: underline; } .wallpost .info .header { padding: 3px 5px 3px; background: #f7f7f7; border-bottom: solid 1px #ffc6c6; xborder-left: solid 1px #ffc6c6; xborder-right: solid 1px #ffc6c6; } .wallpost .info .text { xpadding: 7px; xborder-left: solid 1px #ffc6c6; xborder-right: solid 1px #ffc6c6; padding: 5px 5px; } .wallpost .info { xborder: solid 1px #ffc6c6; xpadding- left: 5px; border-top: solid 1px #ee0000; xborder- bottom: solid 1px #6d84b4; } .wallpost { padding: 0px; margin: 0px; float: left; margin-bottom: 15px; } .wallpost td { padding: 0px; vertical-align: top; } .wallpost td.image { width: 55px; text-align: left; } .witheditlink { text-align: right; } .witheditlink h2 { float: left; }</pre>	<pre>.wbr { display: block; float:left; } .witheditlink { text-align: right; } .witheditlink h2 { float: left; }</pre>
a	<pre>a { color: #ee0000; text-decoration: none; }</pre>	
b	<pre>body { background: #ffffff; padding: 0; margin: 0; } body, p { font-size: 11px; text-align: left; font-family: tahoma, verdana, arial, sans-serif; }</pre>	
d	<pre>div.clear { clear: both; } div.courses_message { margin: 0px; margin-bottom: 10px; padding: 8px; border: solid 1px #ee0000; background: #ffeb3b; color: #505050; } div.courses_message h2 { font-weight: bold; font-size: 14px; margin-bottom: 7px; } div.courses_message p { margin-top: 0px; margin- bottom: 5px; } div.list_of_lectures { margin: 0px; padding-top: 5px; padding-bottom: 15px; }</pre>	<pre>div.clear { clear: both; }</pre>
f	<pre>form { margin: 0px; padding: 0px; }</pre>	
h	<pre>h1 { font-size: 14px; } h1 a { color: white; text-decoration: none; } h1 a:hover { color: white; text-decoration: underline; } h1 em { font-style: normal; border-bottom: solid 1px #ffc6c6; } h1, h2, h3 { margin: 0px; padding: 0px; } h2 .edit { display: inline; margin-left: 8px; } h2 .edit a { color: #907070; } h2 .edit a:hover { color: #ee0000; } h2, h3, h4, h5 { font-size: 11px; }</pre>	<pre>h1 { font-size: 14px; } h1 .subtitle { /* Reserved */ } h1 a { color: white; text-decoration: none; } h1 a:hover { color: white; text-decoration: underline; } h1 em { font-style: normal; border-bottom: solid 1px #D8DFEA; } h2 { font-size: 11px; } h2 .subtitle { /* Reserved */ }</pre>

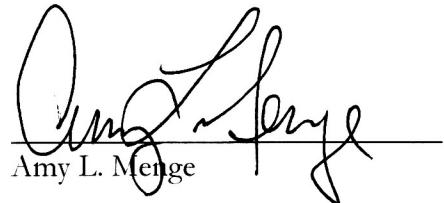
	<pre> h3 { color: #444444; font-weight: normal; } h4 .edit { display: inline; margin-left: 8px; } h4 .edit a { color: lightgrey; } h4 .edit a:hover { color: #ee0000; } h4, h5 { color: #c06060; padding: 0px; margin: 0px 0px 6px 8px; } h5 .edit { display: inline; margin-left: 8px; } h5 .edit a { color: lightgrey; } h5 .edit a:hover { color: #cc0000; } html > body #profileganzbreit { width: 396px; } </pre>	<pre> h3 { color: #444; font-size: 11px; font-weight: normal; } h4 { color: #3B5998; font-size: 11px; margin: 0px 0px 6px 8px; } h4 .edit { display: inline; margin-left: 8px; } h4 .edit a { color: lightgrey; } h4 .edit a:hover { color: #3B5998; } h5 { color: #3B5998; font-size: 11px; margin: 0px 0px 6px 8px; } h5 .edit { display: inline; margin-left: 8px; } h5 .edit a { color: lightgrey; } h5 .edit a:hover { color: #3B5998; } </pre>
i	<pre> img { border: 0px; } input[type~="submit"], input[type~="button"] { border-style: solid; border-top-width: 1px; border-left-width: 1px; border-bottom-width: 1px; border-right-width: 1px; border-top-color: #ff8888; border-left-color: #ff8888; border-bottom-color: #aa0000; border-right-color: #aa0000; background-color: #ff4040; color: #FFFFFF; font-size: 11px; font-family: tahoma, verdana, arial, sans-serif; } input[type~="text"], input[type~="password"] { border: 1px solid #7b9ebd; padding: 3px; font-size: 11px; } </pre>	
s	<pre> select { border: 1px solid #7b9ebd; padding: 2px; font-size: 11px; font-family: tahoma, verdana, arial, sans-serif } select.list_of_lectures { margin: 0px; margin-top: 5px; margin-bottom: 5px; border: 0px solid #7b9ebd; padding: 2px; font-size: 11px; width: 100%; } </pre>	<pre> select { border: 1px solid #bdc7d8; padding: 2px; font-size: 11px; font-family: "lucida grande", tahoma, verdana, arial, sans-serif } </pre>
t	<pre> td { text-align: left; font-size: 11px; } textarea { border: 1px solid #7b9ebd; padding: 3px; font-size: 11px; font-family: tahoma, verdana, arial, sans-serif; } </pre>	
u	<pre> ul.ul_red { margin-left: 15px; margin-top: 6px; padding-left: 0px; padding-top: 0px; color: #c06060; } ul.ul_red li { padding: 1px 0px; } ul.ul_red li span { color: black; } </pre>	

CERTIFICATION

I, Amy Lynn Menge, residing at

10205 Antietam Avenue
Fairfax, VA 22030

do hereby certify that, as a translator certified by the American Translators Association in German-to-English translation, I am conversant with both the German and English languages and that the attached English document is a true and accurate translation, to the best of my knowledge and ability, of the German document attached hereto.



Amy L. Menge

March 19, 2009

Date